



Claim Amendments

1. (currently amended) A dual-band antenna, configured for operation within two non-harmonically related frequency bands, comprising:
 - an antenna element extending from a ground plane, the antenna element electrically isolated from the ground plane; and
 - a tubular sleeve, electrically isolated from the ground plane, coaxial with the antenna element;
and
a dielectric spacer located between the ground plane and the sleeve.
2. (canceled)
3. (currently amended) The antenna of claim 21, wherein the dielectric spacer has a thickness and dielectric constant selected to create a desired sleeve-ground plane capacitive coupling.
4. (currently amended) The antenna of claim 21, wherein the dielectric spacer is a dielectric coating on one of the ground plane, the sleeve or the ground plane and the sleeve.
5. (original) The antenna of claim 1, wherein an outer diameter of the antenna element and an inner diameter of the sleeve are selected to create a desired sleeve-antenna element capacitive coupling.
6. (original) The antenna of claim 5, wherein a dielectric material is positioned between the sleeve and the antenna element.
7. (original) The antenna of claim 1, wherein the ground plane is a radiating element of a second antenna.

8. (original) The antenna of claim 7, wherein the second antenna is one of a GPS and a SDAR antenna.

9. (original) The antenna of claim 1, wherein the antenna element is the inner conductor of a coaxial cable extending through an aperture in the ground plane; and an outer conductor of the coaxial cable is coupled to the ground plane.

10. (original) The antenna of claim 1, wherein the dual non-harmonically related frequency bands are 802.11a and 802.11b/g Wi-Fi frequency bands.

11. (original) The antenna of claim 1, wherein the dual non-harmonically related frequency bands are a low frequency band and a high frequency band; the high frequency band being more than double the frequency of the lower frequency band.

12. (original) The antenna of claim 1, wherein the antenna element extends less than 35mm from the ground plane.

13. (currently amended) A dual band Wi-Fi antenna, comprising:
an antenna element extending through an aperture in a ground plane, electrically isolated from the ground plane;
a sleeve coaxially surrounding a portion of the antenna element, electrically isolated from the antenna element;
the antenna element sleeve spaced away from the ground plane by a dielectric spacer.

14. (original) The antenna of claim 13, wherein the dimensions of the antenna element, sleeve and dielectric spacer are selected to provide the antenna with a standing wave ratio of less than 2 when operated in each of the dual bands.

15. (original) The antenna of claim 13, wherein the sleeve is tubular.

16. (original) The antenna of claim 13, wherein the ground plane is a radiating element of a second antenna.